# PAB OIL & CHEMICAL EPA REGION 6 ONGRESSIONAL DISTRICT 07

# SERVICE, INC.

EPA ID# LAD980749139

Vermilion Parish

Updated: July 8, 2003

# Site Description

**Location:** • Vermilion Parish in Southern Louisiana.

• Site is located three miles north of Abbeville along Highway 167.

**Population:** • 13,000 in Abbeville (nearest town).

• 50,000 in Vermilion Parish.

**Setting:** • Primary land use in the vicinity of the site is agricultural and residential.

• Three Abbeville city wells located within three miles of the site provide water for 18,000 people.

• Private wells within three miles of the site serve another 2,100 people.

• Facility used for disposal of oil based drilling mud and other oil field related wastes.

• Located on a 17-acre plot of land and consists of three disposal pits and four steel holding tanks.

• Site pits cover an area of approximately 300 feet by 360 feet.

Hydrology:

- Underlying the site is a series of over-consolidated clays and sands.
- Major aquifer underlying the site is the Chicot aquifer.
- Normal ground water flow is west/northwest.

#### Present Status and Issues

- EPA is facilitating the PRP effort to utilize the site for beneficial reuse. The initial plan to construct a golf driving range has changed, and now the site will most likely be used as a soccer complex.
- EPA completed a Five-Year Review of the site remedy in July, 2002. The review concluded the remedy appears to be performing as intended and is currently protective of human health and the environment.

### Wastes and Volumes

- Contaminants detected in the pit sludges include arsenic, barium, chromium, lead, manganese, acetone, ethylbenzene, toluene and xylene, polyaromatic hydrocarbons.
- 20,000 cubic yards soils and sludges are anticipated.
- 6,000,000 gallons of surface water are anticipated.

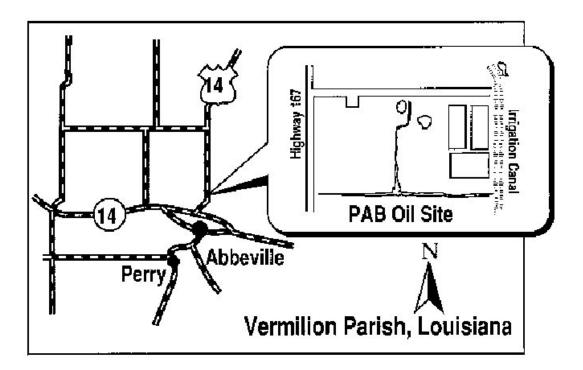
# Site Assessment and Ranking

#### NPL LISTING HISTORY

Site HRS Score: 38.94 Proposed Date: 6/24/88 Final Date: 3/31/89 NPL Update: No. 7

> Deleted from NPL: January 3, 2000

# Site Map and Diagram



# The Remediation Process

#### Site History:

- Property is owned by the Edmond Mouton estate.
- Operated as a disposal facility for oil field waste from 1979 until 1983 by a lease agreement with PAB Oil and Chemical Services, Inc.
- Citizens' complaints of site operations in 1980 led to EPA investigations of the site.
- March 1982- PAB sold to Worldwide Services, Inc., who later tried to cancel its purchase due to the lawsuits, but PAB refused to refund the initial payment.
- In November 1982, the State ordered the site properly closed, however, the company claimed it had no money for closure.
- The site was proposed for inclusion on the National Priorities List in June 1988 and finalized for inclusion in March 1989.

- EPA started Fund-lead RI/FS work in June 1990; findings included elevated levels of barium, arsenic and PAHs in wastes and soils.
- October 1991 Potentially Responsible Parties (PRPs), with EPA oversight, addressed a possibly dangerous problem from a damaged storage tank.
- The RI/FS was completed and the Record of Decision signed in September 1993.
- A Unilateral Administrative Order was signed on November 2, 1994 whereby EPA orders the PRPs to begin the Remedial Design work. This work began on November 17, 1994.
- EPA negotiated a de minimis settlement with several small contributing PRPs.
- While preparing the Remedial Design, the PRPs requested that EPA review the methodology that had been used in determining the PAH contaminant levels, since new analytical methods had been developed with lower detection limits. The sludge material and soils were resampled in both 1993 and 1995 by the PRPs utilizing the advanced methodology. The results showed that it would not be necessary for the material to be bioremediated. EPA agreed and prepared an Explanation of Significant Differences (ESD) which was signed in March 1997. The ESD resulted in taking the bioremediation out of the remedy, but leaving the original dewatering and stabilization phases.
- The Remedial Design was finalized on May 30, 1997 and Remedial Action field work began on June 9, 1997.
- The site saltwater pond was completely dewatered of approximately 6 million gallons in August 1997. The water was treated in a electroprecipitation unit prior to discharge to a drainage ditch. The water was analyzed at regularly scheduled intervals to insure that the discharge water met the regulatory parameters. There were no exceedences of discharge requirements throughout the process.
- A community open house was conducted on November 8, 1997 in Abbeville to provide the community with a status report relative to the history and the current remedial action activities.
- Pond bottom sampling revealed total barium exceeding the remedial action objectives. The PRP removed the top 6" for treatment and disposal into the pit areas with the stabilized/solidified sludge that will be covered with a final cap. Verification sampling of the pond bottom was conducted after the top layer was removed to insure that no contamination remained prior to backfilling and final grading.
- The sludge stabilization/solidification phase of the remedial action kicked off in late September 1997. All sludge processing was completed in May 1998 after which the clay cap was installed. Final grading of the saltwater pond occurred concurrently with installation of the cap
- A pre-final site inspection of the site was conducted on May 27, 1998 at which time a "punch list" of outstanding items was developed. The main items included final grading and revegetation of the site and development of an Operations and Maintenance (O&M) plan for 30 years of ground water monitoring.
- The PRP contractor demobilized from the site on June 20, 1998.
- The remedial action was considered complete in August 1998. The PRP prepared a Remedial Action Report to document the activities that occurred during the remedial response action. An Operations and Maintenance Plan was also developed.
- EPA's Close-Out Report was signed by the Regional Administrator on August 28, 1998.
- The approved Operations and Maintenance Plan (September 1998) was implemented for the first quarter of O & M on October 23, 1998. Because this inspection was conducted in the fourth quarter of calendar year 1998 it is called the Fourth Quarter 1998 inspection. The inspection report was received on December 14, 1998. The First Quarter 1999 inspection was conducted on January 26 and 27.
- The First Quarter 1999 inspection and monitoring report was received by EPA in March 1999. This report included ground water monitoring data. Most of the constituents were below detection limits, including all volatile and semi-volatile organics. The results for metals showed some metals detected. The Second Quarter 1999 inspection was conducted on April 19, 1999.
- The Third and Fourth Quarter 1999 inspections were conducted in July and October, respectively. The July report included ground water monitoring data. Most of the constituents were below

detection limits, including all volatile and semi-volatile organics. The results for metals showed some metals detected, none, however, above their maximum contaminant limits (MCLs). In the Fourth Quarter report, the PRP proposes to change the settlement survey measurements from a quarterly event to an annual event since no settlement has occurred in the first four quarters of measurement.

- A Notice of Intent to Delete (the site from the National Priorities List) was published in the Federal Register in August 1999 and was open for public comment until the end of September. The State had concurred with this notice prior to it being published. No comments were received from the public.
- The site was deleted from the National Priorities List on January 3, 2000.
- The Third Quarter 2000 inspection which included ground water monitoring took place in July 2000. EPA conducted split sampling of the ground water while the semi-annual ground water monitoring was being conducted. The results from the EPA lab and the PRP's laboratory were comparable.
- The Fourth Quarter 2000 Operations and Maintenance Inspection Report was received in December 2000. The inspection activities took place in October 2000 and included inspecting the conditions of monitoring wells, site drainage, site roads, site security, site vegetation, and the clay cap.
- Operations and Maintenance inspection activities include: measurement of groundwater elevations of all site wells, annual clay cap settlement monument survey, collection of groundwater samples from selected wells, analysis of the groundwater samples and a complete site inspection of site conditions.
- EPA conducted a five-year review of the remedy. The report was completed on July 24, 2002.

#### **Health Considerations:**

• Site is located over the Chicot Aquifer, which is a major source of drinking water.

#### Other Environmental Risks:

- High rainfall and short distances to surface water create the potential for contaminants to migrate off site to Coulee Kenny Irrigation Canal; thence, to the Vermillion River.
- The site is unfenced and creates a potential for direct contact.

#### Record of Decision

ROD

Signed: September 22, 1993

• Selected remedy consists of bioremediation then stabilization of pits sludges, surface water treatment and disposal, and ground water monitoring.

Other Remedies Considered

Reason Not Chosen

1. Stabilization Only

Will not address organics
Not cost effective

2. Incineration

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**ESD** 

Signed: March 12, 1997

• A change to the original remedy was made and documented in the Explanation of Significant Differences (ESD) signed by EPA in March 1997. It was determined that biological treatment for soils and sludges would not be necessary due to improved precision and detection limits for the organic polycyclic aromatic hydrocarbons (PAHs) which showed that these constituents were below levels that would be a threat to human health and the environment.

# Community Involvement

- Open houses and workshops: Open house & S.I.T.E Demo: 9/90, Superfund "101" Workshop: 2/91, Open House: 12/92, Proposed Plan Public Meeting: 04/93, Proposed Remedy Change Open House: 1/16/97, Remedial Action Open House: 10/97.
- Milestone/Status Fact Sheets: 5/90, 2/91, 4/91 (Letters), 12/92, Proposed Plan Fact Sheet: 04/93, ROD Fact Sheet: 10/93, 7/96, Proposed Remedy Change Fact Sheet: 1/06/97, Remedial Action Fact Sheet: 10/97
- Citizens on site mailing list: 337
- Constituency Interest: Potential contamination of surface and ground water
- Site Repository: Vermilion Parish Library, 200 N. Magdalen Square, Abbeville, Louisiana 70511; (318) 893-2674

#### **Technical Assistance Grant**

- Availability Notice: 08/04/89
- Letters of Intent Received: Received 8/29/89 from V.A.P.E.
- Final Application Received: V.A.P.E. submitted final application for grant on 6/1/90.
- Grant Award: 9/27/90; The initial three-year budget period was extended through 9/30/96, and a second extension request in now being prepared by VAPE to utilize the remaining grant funds.
- Current Status: VAPE selected Wilma Subra as the Technical Advisor on 12/31/90. The TAG
  was closed in 1999.

#### Contacts -

Remedial Project Manager: Mike Hebert 214-665-8315, EPA (6SF-LP)

State Contact: Todd Thibodeaux 225/765-0487, LDEQ

Community Involvement: Mike Hebert 214-665-8315, EPA (6SF-LP)
Attorney: I-Jung Chiang 214/665-2160, EPA (6RC-S)
State Coordinator: Kathy Gibson 214/665-7196, EPA (6SF-LT)

Prime EPA Contractor: USACE

EPA Ombudsman: Arnold Ondarza, 1-800-533-3508, EPA (6SF)

# **Enforcement**

- General Notice/104(e) letters issued 8/89.
- Special Notice Letters issued 12/89
- PRPs did not conduct RI/FS. EPA conducted RI/FS using fund money.
- PRPs did agree to conduct emergency removal under an Administrative Order on Consent (AOC). Effect on Remedial work is unchanged.
- Pre-Referral Negotiation package 4/93.
- RD/RA Special Notice letters sent January 1994.
- Good Faith Offer received March 18, 1994 rejected by EPA.

• Unilateral RD/RA Administrative Order issued 9-27-94.

## Benefits

- About 20,000 cubic yards of waste and 10,000,000 gallons of surface water were treated at the site.
- Remediation reduced environmental risk for over 15,000 people within a four mile radius of the site.
- The off-site treatment and disposal of all wastes contained in the four on-site disposal storage tanks reduced the threat to off-site drainage systems and residents.